MD iMap Executive Committee Meeting
October 9, 2012
9a.m. – 2:30p.m.
MD Department of Transportation (Hanover, MD)

Opening & Introductions

Topics To Be Covered

- Plan for group to meet quarterly
- Could form subcommittees, as needed
- Ask GIO Office to report back to the group on an item, upon request
- Free to express opinions, make requests of the Technical Committee and GIO Office
- Now have members from outside of the State
    o Will cover some considerations of this during the Ethics Briefing
    o Some ethics-related questions were raised
- Review the Executive Order which reconstituted this group
- Duties/Responsibilities reviewed and discussed
- Presentation of how the new GIO team has been organized
- Discuss costs of the ELA and costs of MD iMap
- Discuss plans for the next generation of MD iMap
- Pursuing open data in support of the Governor's Office
    o Product called Socrata
    o Parallel activity to the MD iMap efforts
- Plans to continue the acquisition of imagery
    o Has been a very successful cooperative effort to date
    o Latest plans for the Eastern Shore this Spring 2013
- Discuss OSPREY Interactive Mapping Applications
    o This product is a favorite of the Governor
- Review Communication Plans
    o Wow we tell people about MD iMap
    o What we tell them
    o How we are going to upgrade the MD iMap website
- Share information related to TUgis 2013
    o One day Maryland GIS Conference, March 19, 2013
- Open discussion until topics are exhausted

Member Orientation & Ethics Briefing – Michael Lord

Michael Lord, Executive Director, State Ethics Commission
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- Outside members had a number of questions about contracts with the state
- Procurement issues have been raised
- Public ethics law covers non-State employees, as well as State employees who serve on Executive Unit

- o MD iMap Executive Committee is not an Executive Unit
  - o Non-State employees are volunteers and are not subject to the law
  - o What does that mean?
    - ▪ Non-State employees don't have to file a financial disclosure statement
    - ▪ State employees who file these statements will still continue to do so
    - ▪ Suggest Non-State employees strive to avoid conflicts of interest
- Important to Non-State employees
  - o Volume of law for Maryland dedicated to Procurement provisions exists
    - ▪ Governs how procurements are to be handled, etc.
  - o One procurement provision was moved to the Public Ethics Law section
    - ▪ Copies available and summarized on State Ethics website
    - ▪ Regardless of employer, applies to all individuals participating in this group
    - ▪ http://ethics.gov.state.md.us/Ethics%20Law.pdf (Bottom page 37)
      "An individual or a person that employs an individual (bidder or an employee of a bidder) who assists an executive unit in the drafting of specifications, an invitation for bids, a request for proposals for a procurement, or the selection or award made in response to an invitation for bids or request for proposals may not:
      - Submit a bid or proposal for that procurement; or
      - Assist or represent another person, directly or indirectly, who is submitting a bid or proposal for that procurement."
    - ▪ Related to fairness concept which considers that one contract is getting an advantage over another entity in competition on a contract bid
    - ▪ Considerations include if a submitted report from the Executive Committee was turned into specifications for a contract by an agency
      - In this case, you would be demeaned as having assisted with drafting specifications and would be precluded from bidding
    - ▪ This is the case whether or not you were aware that the document you contributed to was used

Question: Advice if DoIT produces a RFP at the direction of the group, document sent to committee for review and reviewers are in private sector
- Make a recommendation and look into services which should be acquired, such as recommend a different altitude be used for collecting imagery, not a specification, broad recommendation – OK
- If recommendation is turned into a specification and the review of the document is sent back to the group, anyone who wants to bid should recuse themselves verbally or perhaps in writing to the chair of the committee to make sure that recusal is clearly defined
- The more details and specifics you are in contact with, the more likely recusal will be required of the individual

Scenario: Committee advises that too much is being spent on imagery and more should be spent on addressing, RFP then sent out for addressing acquisition
- This would not be an issue with participation from potential bidders
- Believe the commission would be fine with these involvements

- Additional provision applies to all State employees related to leaving state employment

- o Post-employment restriction if significant assistance was provided to the State by an employee and that employees leaves State service they cannot work for another company for pay in the same matter
    - ▪ Bared for the remainder/duration of that contract
    - ▪ Otherwise goes on forever
  - o Example: Employee working for SHA involved in overseeing contract to re-deck Bay Bridge west bound span
    - ▪ Contractor offers direct employment
    - ▪ State employee is not allowed to work for the contractor working on the same case, contract or specific matter (very narrow application)
    - ▪ However, would not apply to contract on the east bound span of the contract
- Recusal can be noted in the minutes which are taken for a particular Executive Committee meeting

- Call Maryland State Ethics Commission if clarification is necessary

Review & Discuss MD iMap Executive Order – Barney Krucoff
- Single base map that we all shared was the original description
- Local governments can benefit from the data that can be provided back and continue to provide high quality data into the system
- Private sector in Maryland
  - o Small firms throughout the state, large engineering firms, real estate all exporting geospatial services
- Academic
  - o Majority of the universities and colleges have GIS programs
- Transparency
  - o Open data, collecting more data
  - o Governor is openly seeking data and we want to collect your data on behalf of the Governor's efforts
- Most large state agencies are members of the Executive Committee
- Some agencies were swapped in and out from the previous committee
  - o SDAT was a valuable added group
- Local Government members (5 total)
  - o One from west, one from east, one from south, one from capital region, one from north/central
- Industry representatives (5 total)
  - o Utilities, Academic, Real Estate, Aerial Photography, Engineering, Surveying
- Duties of Executive Committee (Executive Order page 5)
  - o "(1) Develop and/or approve MD iMap policies, procedures, and guidance;"
    - ▪ Haven't asked to do so today, but that power is there
    - ▪ Can ask for GIO/Technical Committee to come up with a policy to vote on
  - o "(2) Respond to matters referred by the Technical Committee;"
    - ▪ Good to keep Executive Committee informed
    - ▪ Can ask Technical Committee to do things for the Executive Committee
  - o "(3) Identify funding to support the MD iMap program, develop a budget that describes the collective cost of operating and investing in MD iMap, and provide advice to the Governor on budget matter;"

- Executive Committee has no budget authority
- Advisory committee
- Came make recommendations, we have bought collectively in the past (aerial photography, ELA is another example)
- $1,000,000 non-staff budget, 8 positions in the GIO Office
  - How we spend our time and money is what the group is to help advise
- "(4) Promote the sharing of geospatial data and services among all participants in the MD iMap program while taking into account privacy and security concerns;"
  - Hope the leadership of agencies will do and the members will do
  - Marketing component of MD iMap
  - Gets reinvented regularly
  - Good coordination has been happening more often and overlapping efforts have been reduced
  - Do a better job of providing the public with data and the in-house users are supplied with the same resource, instead of providing additional/separate accesses and resources

    Question: Why is this a problem? We aren't putting enough data in? Users don't know it's there?
  - Have we put enough data in – probably not, more data than we put in
  - Challenge presented today to make the system easier to use and more flexible
  - Define problem: make data we have easier to use/more flexible and have more of it
  - Speed up the engine, to get more data, make it more useful, cycle of growth
  - Produce basemap in MD iMap and the public doesn't have to be concerned with how to display Interstate 95 symbology
    - However advanced users are stuck with the way it looks and cannot redefine for their specific use (Ex.: can't change the color of the road, etc.)
    - Confines or restricts Analysts from doing custom things with the data
  - Looking for ways that the public still has the view of the data, but the advanced users also have access to additional resources
  - Some concerns about security for data whether or not to make it available (sewer lines, etc.)

- Technical Committee is open to all interested in participating
- Metrics for MD iMap
  - Something in the Executive Order, some provided previously, but need more in the future
  - Central license manager has been setup and tracking license use has commenced
    - Results from the license tracking will aid in future ELA negotiations with Esri
- Communications Plan
  - Information to be shared today
  - Slides presented with specific changes we would like to make on how we communicate
  - See if this is enough or go back and development a more formal plan, as needed

Technical Committee Update – Julia Fischer (Presentation Slides Available)
Data Sharing Opportunities
- Exploring a number of software packages which would allow for more cross platform data sharing

- o This includes allowing for map services created using Esri products to be shared with GIS users in the Google environment
- ArcGIS Online is currently being added to the existing Esri ELA for Maryland
  - o AGOL for Organizations has been used to quickly develop and deploy power outages maps
    - ▪ In response to the Derecho event in July displaying power outage numbers by ZIP code
    - ▪ In response to the power study of areas experiencing multiple outages during the past three major events (Snowmageddon (2010), Hurricane Irene (2011) and the Derecho (2012))
  - o All AGOL maps and applications have the added benefit of being viewable via mobile devices
- Google Maps Engine product was evaluated through a joint state agency pilot
  - o Although the product allows for the data to be made available to those in the Google environment, there is a significant amount of duplication in data loading that would be required
- One scenario that has been proposed is to evaluation this product for a longer period of time and determine if it can be included in existing workflows and enhance, not hinder these workflows
  - o Additional updates to be provided in the future concerning the status of this product evaluation
- Arc2Earth is an extension which works along with the ArcMap Desktop product from Esri
  - o This extension allows for conversion of data from the ArcMap environment to .kml, which is viewable in the Google environment
  - o This appears to be a straight forward solution to loading the data in one environment, but making the data accessible cross platform
  - o This product has recently been demoed and a decision has yet to be made on whether or not to proceed with procuring this additional product

Data Updates
- There are almost 300 map services available via MD iMap
- Parcel data has recently been added for the entire state
  - o This includes polygon coverage and will be updated on a quarterly to semi-annual basis
  - o In the future, additional attributes are anticipated to be added along with the SDAT URL links which are already available for each parcel polygon
  - o This is an extremely valuable resource and a significant effort was put forth by Jim Cannistra at MDP to coordinate this successful initiative
- Follow MD iMap via Twitter or the MD iMap Portal for information on updates to specific services

Application Updates
- Continue to add new applications to the Portal, providing marketing for those deploying interactive maps
- Follow MD iMap via Twitter or the MD iMap Portal for information on updates to specific applications and new applications announcements

Portal Updates
- Recently a list of WFS-enabled map services, these are map services which can be downloaded to a local machine, was made available under the Help tab on the Portal
- Instructions on how to download these map services is also available under the Help tab on the Portal

- MD iMap Technical Committee meetings are held the 1st Tuesday of each month

- We are relying on the members of the Executive Committee to actively designate Technical Committee participants
  - All meetings are at MDE and all are welcome to attend

DoIT GIO Office Organization & Budget – Barney Krucoff (Presentation Slides Available)
- Numbers Board has provided a significant amount of funding over the past years

CGIS Work
- Approximately $400,000/year has been provided to CGIS for infrastructure maintenance
- Time and materials basis with Technical Committee directing CGIS in the past
- Some lump sum tasks have been defined now with GIO Office
- Cascading Geocode Service
  - Geocoding with MD iMap – combine resources to make a more accurate match
  - First cascade to the building and prorated to another result if the first pass doesn't find a match
  - Geocoding is the number one task completed around the state – want to provide a better resource
- Maintenance covers about 1/3 of the costs
- In addition to DNR's $400,000, DoIT/GIO has $1,000,000 to spend
- Reorganization progress was awkward, but now has $1,000,000 to spend collectively
  - Developers have already been put into place from this pot of funding
  - Hoping to raise the contract with CGIS
    - Getting lump sum tasks – 10.1 environment, hosting in the cloud
  - 25% increase over what was being done in the past
  - Socrata software is in the GIS budget and paid for through March 2013, $80,000
  - OSPREY remake – more complicated applications, needs a remake, in Flash, talking about public version, estimate to take $100,000 to complete
  - Health and Law Enforcement Single Platforms
    - Governor really wants this done, wants a lot more Health and Law Enforcement data at StateStats
    - Want to dive into health statistics more than is done now
  - Address Integration
    - From SU and BB money hire a full time coordinator to work with the local governments
    - Need a data model, need to compare local data with state data
    - Won't be enough funding to fix all of the issues, but will pinpoint the areas which need additional attention or additional work in the future (rural areas without enough coverage and urban areas where the locations are densely located and overlapping)
  - Additional funding keeps GIO Office operating
  - ELA – Enterprise License Agreement
    - Software is bought through one contract with DoIT to Esri
    - Unlimited use of their software across the state
    - Call DoIT and obtain a new license
    - Central License Server (CLA) allows for use tracking and will be used to renegotiate next contract
    - MDOT is the most significant contributor
    - 3 – 5% increase each year of the three year contract with 2 option years

- Escalating costs will be absorbed by DoIT for the remainder of the existing contract and other agencies will not be asked to contribute any more than they have in the past (agency costs will be stable), increasing $20,000 each year to Esri

- Are things missing, are we moving in the wrong directions? – Questions/Comments/Options
- Implement central licensing management server to provide cost savings when renegotiating contract, price set for three years
- Believe we will be able to renegotiate with Esri very well with the information being tracked and collected
- Want to implement OpenLM to get an even clearer idea of utilization
- Tricky part is ArcGIS online which has costs involved with Cloud utilization and needs to be managed now, so there aren't additional costs on top of the existing contract costs
- CLM reliability has been 100% and allowed for wider range of users within the organization
  - Get an assessment of how many concurrent users are active on a particular day
  - Determine peak day and that is the place to negotiate from
- Webpage – doit.maryland.gov has connectivity for license requests, SwGI site at some point which will not allow outside agencies to get access
- Using CLM doesn't require any contact with DoIT, download software and hook to CLM through the local machine
- Need to get the SwGI connection to work and firewall changes will need to be made at the agency to make sure that the connection can be made

Data Migration – Lisa Lowe (Presentation Slides Available)
- ISO Categories
  - May be extended beyond the current availabilities because some of the folders contain a significant amount of data that needs to be placed into sub-folders
- Web Mercator Coordinates
  - Industry standard which we will be moving to, used by Google, BING and Esri
- Reorganization and Exposure of SDE Feature Classes
- Reorganization of Map Services

Question: When the service was last updated, how is this information being conveyed and documented?
- Require metadata, discussing how much, to what extent
- Data management plan is also being put together which will cover update requirements and documentation requirements
- Plan to update annually, or semi-annually based on the map service in question
- What data do we have in the central database, is it static data, do we let agencies serve out data onto this system which is maintained almost daily
- Look at properties of each service have included the month and year of the most recent update, just started, at least when last published, but not clear on when the data layer was last updated

- Semi-orphaned datasets, not completely clear on who is the data owner of the data which is on MD iMap infrastructure
  - Orphans will be claimed by DoIT and metadata will be filled out accordingly

Question: Will the recreation of the data structure and the move from 10.0 to 10.1 be at the same time?

- Keep things the way they are at 10.0 and migrating to 10.1 will also include the updated definition of organization
- Can't move all of the data at once, prioritize the applications and prioritize the data related to these applications being redeveloped by DoIT

Web Application Migration (Flash to JavaScript) – James Somerville & Stephen Sporik (Presentation Slides Available)

- Flex fit the need of allowing for a lot of developers to make rich, interactive maps and were appropriate at the time of development with the State in 2007 – 2008
- More and more mobile devices and the lack of accessibility of the flash plug-ins on Apple mobile products fueled the need to move to another development language
- Standard templates to be used to convert existing applications and create new applications with standard look and feel
- Using HTML5, CSS, JavaScript
- Also want to be able to register this templates inside of the ArcGIS Online environment, so applications can be developed in this environment on the fly

- Architecture design
  - Open source the code being developed for these templates
  - github.com allows for checking in and out code and tracking changes, also includes wikis and other resources for those seeking help with using the resources
  - Open source libraries to be included to create the responsive design of an application
    - Dojo, bootstrap from twitter
  - Responsive Design
    - Adjust the look and feel based on the device viewing the application
- Open source utilization for data sharing and development allows for utilizing the central repository framework which is already in place at no cost

- Started with an audit of the existing applications
  - Determine standard tools and note unique tools being applied
    - Want the address tool to work the same in all applications
  - Starting with Smart, Green and Growing applications which will allow for rebuilding more complex applications onto the foundation rebuilt for these applications
  - Contact the GIO Office to discuss getting your existing application onto the list of those which will be redeveloped with assistance from the contractors

Question: AgPrint and GrowthPrint applications need some significant redesign, before redevelop want to coordinate with the host agency and the users to incorporate redesign components at the same time ad redevelopment is being conducted

- Quickly redeveloping as many applications as possible over the next 6 months or allow for scope creep of redesigning applications at the same time and not getting as much converted

- At the least we will replicate the functionality currently there and add some reasonable additional functionality
- At the least make sure that the requirements are documented and the desired additional functionalities and capabilities are documented
- Behind the scenes allow for the code work that is being done is available, can be enhanced by other developers, outside of this contract or can pick up where these contracts left off in the future

Communication Plan, Outreach Plan & MD iMap Website Changes – Julia Fischer (Presentation Slides Available)

Communication Plan Purpose
- Maintain MD iMap and its resources as a reliable and consistent centralized resource for all stakeholders

Communication Plan Resources
- Currently utilizing updates on the Portal, Twitter (@MDiMap) and Email to communicate with stakeholders and end users/general public
- Depending on the scenario, a unique branch of the communication plan will be put into place
    o A system crash would trigger an immediate and continuous communication stream until the event was resolved
    o A new application announcement would be shared through available channels of communication on a more measured and impactful manner

Outreach Plan Purpose
- Expand the number of stakeholders, both as end users and contributors or participants to MD iMap
- Coordination with other GIS and GIS-user communities, such as MSGIC, MUG etc. is also a valuable use of time and resources

Website Changes
- Anticipate an enhanced Executive Committee section with presentations, minutes and additional resources meeting the specific needs of the Executive Committee
    o Contents of this portion of the website will be shaped based on the requests and interests of the Executive Committee
- Current search of map services is limited to MD iMap servers only
    o Future searches will include map services on servers beyond those of MD iMap only
- github.com and the Developer tab will be used to expand sharing of code to the developer community
- A calendar will added to allow for tracking of upcoming meetings and other related events

Website Changes Timeline
- Migration of existing website to the SharePoint environment estimated to be completed by early 2013
- Redesigning of the website will continue through 2013
    o Comments and suggestions from the Executive Committee are welcome throughout this process concerning all portions of the website

Master Geospatial Services Contract – Lisa Lowe (Presentation Slides Available)
- CATS current contract vehicle

- Put out another contract that would be more limited
  - Photogrammetric Services, Cloud Services, GIS services
  - 10 awardees total, 3 or 4 per functional area
  - Smaller group of firms that would get to know us and how we run our business
  - Started with a larger pool each time it is less efficient when starting with a new contract
- Cloud Services & Implementation may or may not remain
  - Western States Alliance (WSCA)
  - Maryland has used this contract vehicle in the past and might be applied to this specific functional area

Addressing Initiative – Barney Krucoff & Mike Scott (Presentation Slides Available)
- Job Opening: First consideration closes 10/14/12
- Joint effort between SU and GIO
- 2 year appointment

Open Data – Barney Krucoff (Presentation Slides Available)
- CGIS putting together a custom REST end point, which allows for downloads to Socrata
- Some agencies have contributed a significant amount of data to MD iMap – MDP for example
- Health and Mental Hygiene have contributed 2, Transportation has contributed 8

Eastern Shore Imagery/Parcel Mapping Status – Jim Cannistra (Presentation Slides Available)
- First set acquired in 2007/2008
- Specification revised and enhanced in 2011
- Spring collection in spring 2013 for Eastern Shore
- MSGIC organizations, MD iMap, SU or CGIS and private sector coordination
- Data loaded in MD iMap for access as a map service and provided to USGS
- All funding expected through the Numbers Board
  - October 25 meeting being attended by Jim and Kenny
  - Supportive, but not confirmed
- Previous acquisition updated the service on MD iMap as the imagery was approved and did not wait for the entire dataset to be accepted before updating in MD iMap
- Tree health, impervious surface mapping is why the CIR is so important

- County-based data set and updated data from counties make up the parcel map service data
- Adding additional attributes to each polygon in the future
- Working extensively with counties to develop integrated parcel dataset
  - 2013 working with 5 or 6 more

TUgis Conference 2013 – Barney Krucoff
- 1 day conference
- $50 - $75 to attend
- Sponsor prices will also go down
- Goal is to make this Maryland's Geospatial conference and increase attendance

- First two hours of the conference for MD iMap, MSGIC and Locals on the same page for promotion and discussion
- March 19, 2013

OSPREY Improvements – Mick Brierley & Kenny Miller (Presentation Slides Available)
No updates provided based on lack of time

Situational Awareness Coordination – Mick Brierley & Kenny Miller
No updates provided

Open Discussion – Elliot Schlanger & Barney Krucoff
Question: Systems and data should be developed based on the decisions to be made and are we doing enough outreach to the decision makers

- A lot of Cabinet Secretaries that sit on this Committee or their designee
- It is not the GIS people alone to decide the strategy and we are all trying to get to that
- How do we make sure these visions stay in mind without allowing this to become a technical exercise?
- More of a dialog from the people in the room about what needs are brought into the room and contributions are brought into the room
- Fostering the meetings so they are a dialog would like to hear what this means to you and what works or what doesn't work concerning how the data is currently being shared, made available
- Prior to next meeting send out shopping list of topics, get people to prioritize and instead of just an update, the next meeting is a focused set of topics which are important to everyone and dive more deeply into those topics and gets participants engaged

- Research that has been done about other states, what they are doing and what we can learn from them
- Kenny Miller has been elected NSGIC President and is President-Elect for 1 year, President for a year, he will be at the forefront of understanding what these other states are going to be doing
- Maryland is far out in front of other states as to how we organize our data, still some work with agency, both state and local, coordination and cooperation
- Get one state agency to present their stuff at each of the upcoming meetings – Greg Slater (SHA) for the next meeting, always have a show and tell

- Value to have a visit from people who are running similar systems in neighboring states
  - Virginia was out in front and have plateaued, would like to hear about this process and why
- Is MD iMap as currently configured working for us? – each group member should provide an answer
  - Map services have been created for a specific application and does not have a lot of value for some of the other groups which want to conduct more specific analysis, but progress has been made
- What was not covered that should have been?

- Security is a big concern and accessibility of the data
- NCR GDX is one product trying to sell and now there is another product that needs to be sold to the different groups and agencies
- Governor wants law enforcement single platform – why?

- There are other data layers to be collected before we move to the other requirements of data which involve secure and sensitive data
- Data that many agencies have is public data and a political move is in place to be transparent and put raw data out for the public, which is not always clear to us
- No agency is being asked to put out information that would compromise public safety

- Integration with locals, are we passing up synergies with these partners, conversation about working together to get to a better outcome that benefits all participants

Question: Distinction between the role of the Executive Committee and the Tech Committee
- Discussion among the Executive Committee talk about what needs to be done and Tech Committee deals with the how to accomplish these tasks
- How much was clear on the technical details which were shared today?
- Moving forward how to best segment the technical components from the administrative components

Question: Attempting to get this group to advise and make a decision
- Some are stakeholders and some are the representatives for a larger group of stakeholders
- We need the group's advice or will continue to keep doing what we are doing and will at least keep the group informed
- Show and tell can be a routine and would be more instructive for breakout sessions which allows people to select which topics/groups they want to participate with
    - At the end groups report to the entire group based on the discussions
    - Challenge to have a discussion with 40 people in the same room, wouldn't be able to get the agenda to match the interests and needs of the entire group
- Can work in more professional facilitation
- Start with coffee and networking and brief update and then break into more applicable sub-group discussions

Question: Why expand the Executive Committee now to include these additional groups and representatives?
- Didn't think there was much use of MD iMap by the locals and even less dialogue
- Wanted to get some tension of procurement issues cleared up
- Wanted more representation from utilities and other groups that hadn't previously been involved
Why would we close the meeting to just those in the state?
- History has shown that there is a cycle of the state working with the locals and then a fission with a reforming of the two groups into one again
- Want everyone to be involved as the system is still developing and contribute ideas and help mold the future directions

- Executive Committee can work with itself to get the value proposition to its own members as well as reaching out beyond those groups
- How do we put the value proposition together to get additional agencies using the resources and applying them effectively and creating new relationships

- This group is the first one which is sanctioned by the State and we now have it and it is our chance to run with it
- GIS in the State is not an afterthought

Next Meeting: Early January 2013
- Report on progress we have made
- Report from an agency (SHA)
- Look at improving interactive with local governments and have them participate in the presentation
- Current location worked well, anticipate having next meeting at the same location